### PATENT COOPERATION TREATY

## **PCT**

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference A3-267PCT	FOR FURTHER ACTION	See item 4 below					
International application No. PCT/US2004/002818	International filing date (day/month/year) 29 January 2004 (29.01.2004)	Priority date (day/month/year) 30 January 2003 (30.01.2003) ]					
International Patent Classification (IPG 7 H01R 12/16	nternational Patent Classification (IPC) or national classification and IPC H01R 12/16						
Applicant MOLEX INCORPORATED							

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis. 1(a).						
2.	This REPORT consists of a total of 6 sheets, including this cover sheet.						
	In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.						
3.	This report contains indications relating to the following items:						
	Box No. I Basis of the report						
	Box No. II Priority						
	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability						
	Box No. IV	Lack of unity of invention					
	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
	Box No. VI	No. VI Certain documents cited					
	Box No. VII	Certain defects in the international application					
	Box No. VIII	Certain observations on th	e international application				
4.	4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis.2).						
			Date of issuance of this report 05 August 2005 (05.08.2005)				
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland		mbettes	Authorized officer Simin Baharlou				
	acsimile No. +41 22 740 14 35 Telephone No. +41 22 338 71 30						

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

RECEIVED From the INTERNATIONAL SEARCHING AUTHORITY 29 JUL 2004 To: PCT WRITTEN OPINION OF THE see form PCT/ISA/220 INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet) Applicant's or agent's file reference FOR FURTHER ACTION see form PCT/ISA/220 See paragraph 2 below International application No. International filing date (day/month/year) Priority date (day/month/year) PCT/US2004/002818 29.01.2004 30.01.2003 International Patent Classification (IPC) or both national classification and IPC H01R12/16 Applicant MOLEX INCORPORATED This opinion contains indications relating to the following items: Box No. I Basis of the opinion Box No. II Priority ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Box No. IV Lack of unity of invention Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement ☐ Box No. Vi Certain documents cited Box No. VII Certain defects In the international application Box No. VIII Certain observations on the international application **FURTHER ACTION** If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:

<u>)))</u>

European Patent Office - Gitschiner Str. 103 D-10958 Berlin

Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840 Authorized Officer

Stirn, J-P

Telephone No. +49 30 25901-565



### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

3

¢,

International application No. PCT/US2004/002818

	•					
Box No. I Basis of the opinion						
<ol> <li>With regard to the language, this opinion has been established on the basis of the international application in the language in which it was field, unless otherwise indicated under this item.</li> </ol>						
This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).						
<ol><li>With regard to any nucleotide and/or amino ac necessary to the claimed invention, this opinion</li></ol>	<ol> <li>With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:</li> </ol>					
a. type of material:						
☐ a sequence listing						
☐ table(s) related to the sequence listing						
b. format of material:						
☐ in written format	·					
☐ in computer readable form .						
c. time of filing/furnishing:	·					
$\Box$ contained in the international application	as filed.					
filed together with the international applic	cation in computer readable form.					
☐ furnished subsequently to this Authority	for the purposes of search.					
has been med or jumished, the required sta	rersion or copy of a sequence listing and/or table relating thereto tements that the information in the subsequent or additional as filed or does not go beyond the application as filed, as					
4. Additional comments:						

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2004/002818

-	Box No. II	I Priority				•		
1.		☐ The following document has not been furnished:						
							, ,,	
							le 43 <i>bis</i> .1 and 66.7(b)).	
	never	Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.						
2.	This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43 <i>bis</i> .1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.							
3.	Additional	observations, if nece	essary:	•				
						•		
_								
	Box No. V industrial	Reasoned states applicability; citation	ment und ons and e	er Rule 43 explanatio	3 <i>bis</i> .1(a)(i) with ns supporting	h regard to novel such statement	ty, inventive step or	
1. Statement								
	Novelty (N	)		Claims	1-15			
			No:	Claims			•	
	Inventive s	tep (IS)	Yes:	Claims	1-15			
			No:	Claims				
	Industrial a	pplicability (IA)	Yes: No:	Claims Claims	1-15			
2.	Citations a	nd explanations						
	see separa	ate sheet						
						·		
	Box No. VI	Certain defects	in the int	ernational	application			
— Th		defects in the form of				notion have be	ata di	
			Contents	or the line	панопагарри	auon nave been n	otea:	
	see separate sheet							

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

PCT/US2004/002818

### Re Item V.

1 The following document is referred to in this communication:

D1: WO 03/005489 A (HIRATA HIDEYUKI; HIRAYAMA TAKAAKI (JP); MOLEX INC (US)) 16 January 2003 (2003-01-16)

Document D1, which is considered to represent the most relevant state of the art, discloses:

A ZIF electrical connector comprising an insulative housing with a cover which is moveable between a first position and a second position. The cover is slideably assembled to the base of the housing and defines a plurality of through holes corresponding to terminal receiving cavities. A drive means in the form of a lever is extending from the housing.

From this, the subject-matter of independent claim 1 differs in that: the base defines a recess portion slant with the first direction of moving the cover. A slider is moving in the recess portion having a body portion which is moved by the drive means along a direction slant with the first direction.

- 2.1 The subject-matter of claim 1 is therefore novel (Article 33(2) PCT)

  The problem to be solved by the present invention may be regarded as: how to improve the workability of a ZIF connector.
- 2.2 The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons: the base defines a recess portion slant with the first direction of moving the cover. A slider is moving in the recess portion having a body portion which is moved by the drive means along a direction slant with the first direction. The mechanism of a ZIF connector is thereby improved. None of the cited documents discloses such a solution.
- 2.3 Claims 2-15 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

PCT/US2004/002818

Re Item VII.

The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).